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7 SEP 1966

MEMORANDUM FOR: Director of Central Intelligence

SUBJECT: Considerations bearing on OXCART use
over Cuba

PROS:

1. It would establish and validate the operational capability of the OXCART system to perform photo reconnaissance of a defended area, in which weather is a continuing factor.
2. It would confirm the reliability of the basic aircraft system.
3. Should they elect to exercise the SA-2 defenses, it would provide an opportunity to try the first generation electronic jammers.
4. It would provide a unique opportunity to test the response (detection range, handling capacity, etc.) of a Soviet-type air defense system to a low cross section Mach Three reconnaissance plane. This dynamic response is unknown at present--probably even to the Soviets. In our estimates of Communist defensive capabilities, we have always assumed them to be perfect so as to be defense conservative. However, they are probably far from perfect and such experience would provide a more confident judgment of survivability in time of real need.
5. The initial reaction would be that of the Cuban manned defenses. We would expect the Soviets to move in and exploit this opportunity to calibrate their own capability. This would give us a valuable "before-and-after" look at the defensive capability which could be followed both through COMINT and through the warning intercept systems carried on OXCART itself.

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6. Utilization of OXCART over Cuba could provide a low-key introduction of OXCART into our ordinary reconnaissance operations, thereby signalling an upgrading of equipment used in such activities. OXCART use in such a situation would tend to accustom both the Communist and Free World nations to the concept of its normal use in the same role as the aging U-2.

CONS:

1. It would provide a measurement of the OXCART radar cross section to the Cubans and Soviets, which is probably unknown to them.

2. Unless we flew the missions off nominal, it would allow the Cubans and Soviets to pin down the operational speed, altitude, and turning radius of OXCART, which they now know only generally.

3. Since we must be prepared to turn on the electronic jammers even against exercises of the SA-2 systems in Cuba, it would give them an opportunity to establish the basic philosophy of the first generation ECM. The noise jammer (BIG BLAST) which works against the (FAN SONG) tracking radar is old hat, and would reveal nothing of interest. The guidance link jammer (BLUE DOG) would reveal our insight into the Soviet command coding and our ability to override and mislead the missile guidance system. However, it should be noted that the second and third generation jammers would not normally be flown, and therefore neither tested nor exposed to compromise.

4. If our estimates of the OXCART invulnerability are drastically wrong and the OXCART were brought down in Cuba, the Soviets would gain a great deal technologically, since much of the airplane would survive its crash. However, we consider this totally unlikely.

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COMMENTS:

5. Of the likely losses, the cross section and guidance link jammer would be the only significant ones. We could constrain the missions so as not to reveal these features; however, this would detract from the value of the operational validation.

6. Political considerations are covered in Board of National Estimates Memorandum of 6 September 1966.


ALBERT D. Wheelon
Deputy Director
for
Science and Technology

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